dacor
The Life of the Kitchen.®

Installation Instructions

Downdraft Raised Vent

Models: ERV36-ER, ERV48-ER

GOEDEKERS
Trusted since 1951

These downdraft vents are designed for use with Dacor® ER36D and ER48D series ranges.

Part No. 103106 Rev. C

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Tested in accordance with the latest edition of ANSI Z 21.1 standard for household gas cooking appliances, ANSI/UL 858 household electrical ranges, CAN/CSA-C22.2 NO. 64 Standard for Household Electric Cooking and Liquid Heating Appliances, and UL 507 electric fans .

All specifications subject to change without notice. Dacor assumes no liability for changes to specifications.

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Before You Begin...

Important:

- **Installer:** In the interest of safety and to minimize problems, read these installation instructions completely and carefully before you begin the installation process. Leave these installation instructions with the customer.
- **Customer:** Keep these installation instructions for future reference and the local electrical inspector's use.

Important Safety Instructions

Important Information About Safety Instructions

- The ***Important Safety Instructions*** and warnings in these instructions are not meant to cover all possible problems and conditions that can occur. Use common sense and caution when installing, maintaining or operating this or any other appliance.
- Always contact the Dacor Customer Service Team about problems and conditions that you don't understand. See ***Customer Service Information***.

Safety Symbols and Labels

⚠ DANGER

Immediate hazards that **WILL** result in severe personal injury or death.

⚠ WARNING

Hazards or unsafe practices that **COULD** result in severe personal injury or death.

⚠ CAUTION

Hazards or unsafe practices that **COULD** result in minor personal injury or property damage.

⚠ DANGER

IMPORTANT: Do not store or use combustible, flammable or explosive vapors and liquids (such as gasoline) inside or in the vicinity of this or any other appliance. Also keep items that could explode, such as aerosol cans, away from the range. Do not store flammable or explosive materials in adjacent cabinets or areas.

READ AND SAVE THESE INSTRUCTIONS

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Important Safety Instructions

General Safety Precautions

To reduce the risk of fire, electric shock, serious injury or death when using your appliance, follow basic safety precautions, including the following:

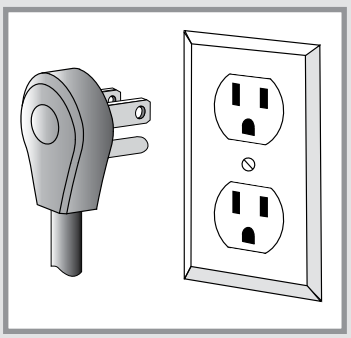
⚠ WARNING

1. Do not install or operate this unit if it has been damaged, dropped, has damaged electrical wiring or is not working properly. If the product is damaged when received, immediately contact the dealer or builder.
2. Use this raised vent only for its intended purpose as outlined in the use and care manual. Do not use this unit to vent hazardous or explosive materials or vapors. This appliance is not intended for commercial use.
3. The customer should not install, repair or replace any part of this unit unless specifically recommended in the literature accompanying it. A qualified service technician should perform all other service. Contact the Dacor Customer Service Team for examination, repair or adjustment.
4. Keep all packaging materials away from children. Plastic bags can cause suffocation.
5. This raised vent must be installed and grounded by a qualified installer according to these installation instructions. All installation work and electrical wiring must be performed in accordance with all applicable codes and standards, including fire-rated construction.
6. Install or locate this appliance only in accordance with these installation instructions and the Dacor range installation instructions. Improper installation, adjustment, alteration, service or maintenance can cause serious personal injury or property damage.
7. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guidelines and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
8. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
9. Always vent ducted fans to the outdoors. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.
10. Before installing or servicing the raised vent, disconnect the power plug from the electrical outlet.

⚠ WARNING

11. To reduce the risk of electric shock or fire connect remote blowers with a total combined current draw of eight (8) amps or less.
12. The installer must show the customer the location of the electrical outlet so that the customer knows where and how to disconnect power.
13. Read the use and care manual completely before using this raised vent.
14. Do not tamper with the controls.
15. Never allow the filters or vent openings to become blocked or clogged. Do not allow foreign objects, such as cigarettes or napkins, to be sucked into the vent holes.
16. Clean the filters and all grease-laden surfaces often to prevent grease fires and maintain performance. Clean this appliance only as specified in the use and care manual.
17. Do not leave children or pets alone or unattended in the area around the range when it is in use. Never allow children to sit or stand on an appliance. Do not let children play with a range or the raised vent. Do not store items of interest to children above or around the range.
18. Install this raised vent only with Dacor ER36D and ER48D series ranges.
19. This appliance is equipped with a three-prong grounding plug for your protection against possible electric shock hazards. It must be plugged into a dedicated, grounded electrical outlet. Where a standard two-prong wall receptacle is encountered, it is the personal responsibility and obligation of the customer to have it replaced with a dedicated, properly grounded three-prong wall receptacle. Do not under any circumstances:

- Cut or remove the third (ground) prong from the power cord.
- Use an adapter plug.
- Use an extension cord.
- Use a power cord that is frayed or damaged.
- Use of a ground fault interrupter (GFI) is not recommended.



MODELRO Since 1951

Customer Service Information

If You Need Help...

If you have questions or problems with installation, contact your Dacor dealer or the Dacor Customer Service Team. When you call, have the model and serial number of the appliance ready. The model and serial number are printed on the appliance data label on the front of the unit.

Dacor Customer Service Team

Phone: (800) 793-0093
Web site: www.Dacor.com

Monday - Friday 6:00 A.M. to 5:00 P.M. Pacific Time

Appliance Data Plate

The appliance data label also specifies the power supply requirements.

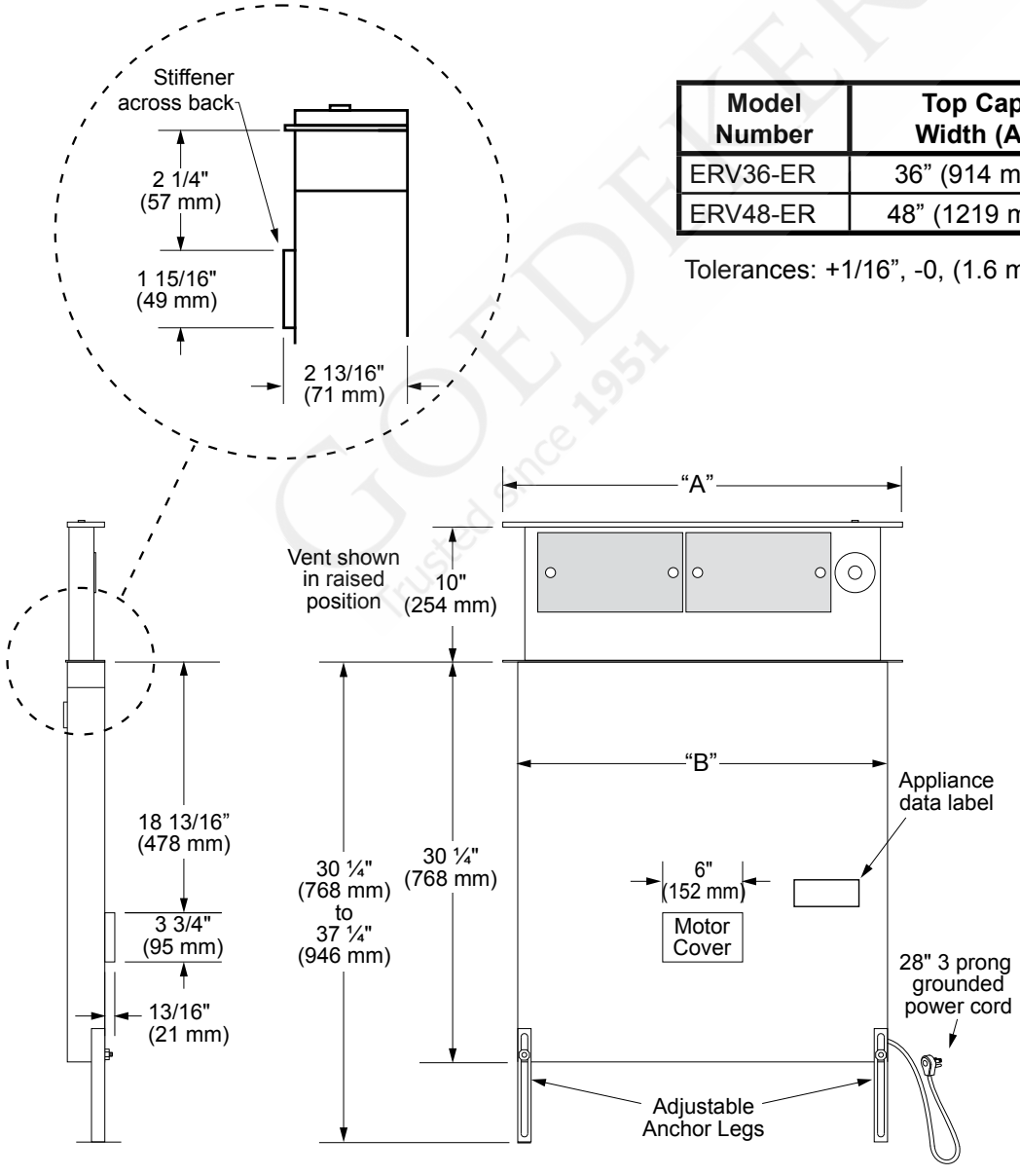
Model Identification:

ERV36-ER = 36-Inch Raised Vent

ERV48-ER = 48-Inch Raised Vent

Product Specifications

Product Dimensions



Model Number	Top Cap Width (A)	Chassis Width (B)
ERV36-ER	36” (914 mm)	33 3/8” (848 mm)
ERV48-ER	48” (1219 mm)	43 3/8” (1102 mm)

Tolerances: +1/16”, -0, (1.6 mm,0) unless otherwise stated

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Installation Specifications

⚠ WARNING

- Observe all governing codes and ordinances during planning and installation. Contact your local building department for further information.
- The electric outlet for the raised vent should be installed only by a licensed electrician.

Electrical Specifications

The raised vent is supplied with a 28" (711 mm) power cord terminated by a three-prong plug. Plug it directly into a dedicated, grounded, three prong, electrical outlet. Do not use an extension cord.

The correct voltage, frequency and amperage must be supplied to the electrical outlet from a grounded, single phase circuit that is protected by a properly sized circuit breaker or time-delay fuse.

Electrical Supply Requirements

- A 3 prong electrical outlet connected to a 120 Vac, 60 Hz, 15 Amp. grounded, dedicated circuit is required.
- The customer must supply conduit with minimum current carrying capacity of 8 Amps to supply power to the remote blower from the raised vent. See ***Planning the Duct Work*** for further details.

- The above specifications are for reference only. If the power supply requirements shown above do not agree with those listed on the appliance data label, use the required voltage, frequency and amperage ratings on the appliance data label.
- It is the owner's responsibility to ensure that electrical outlet is installed by a licensed electrician. The electrical installation must comply with the latest revision of the National Electric Code ANSI/NFPA 70 (latest revision) and local codes and ordinances.
- If the electrical service provided does not meet the product specification, or does not conform to the NEC or local standards, do not proceed with the installation. Call a licensed electrician to correct the electrical service before proceeding.
- Locate the electrical outlet in an accessible location, so that the power plug can be disconnected for service without removing the raised vent or the range from the cabinet.

Planning the Installation

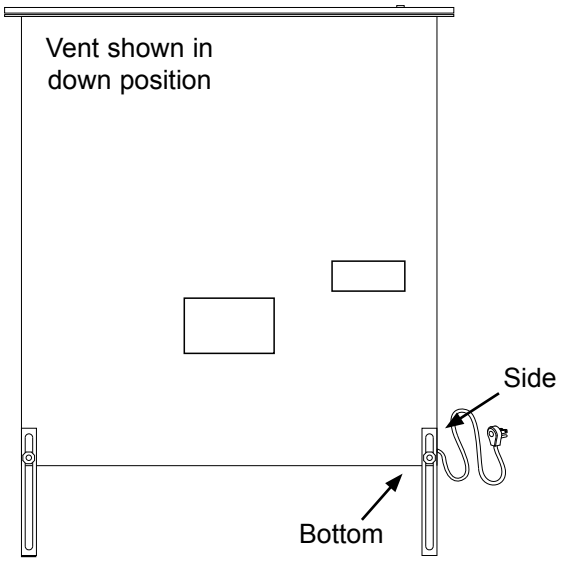
System Layout

- The vent system consists of the raised vent itself and a remote blower. You must install a Dacor model REMP3 or REMP16 remote blower for the raised vent to operate properly. For directions on installing the remote blower, see the REMP3/16 installation instructions.

⚠ WARNING

- Failure to install a remote blower or proper duct work may result in a back draft and/or the insufficient venting of smoke and fumes.
- To reduce the risk of personal injury caused by reaching over a hot appliance, cabinet storage space located directly above the range should be avoided.
- Do not store combustible materials or items adversely affected by heat in cabinet areas above the appliance.
- Follow the instructions and diagrams for minimum safe clearances and installation location. Failure to do so may result in a fire or safety hazard.

- Wire the remote blower to turn on when the raised vent is turned on by running a piece of conduit parallel to the duct work and connecting it to the raised vent on one end and the remote blower on the other. There are 7/8" access holes in the bottom and side of the raised vent for connecting the conduit.



Conduit Access Hole Locations

- The raised vent exhaust may be configured to vent through the back, the bottom or through one of the sides. The maximum allowable duct run must be taken into consideration when determining the layout. See ***Planning the Duct Work*** for further details.

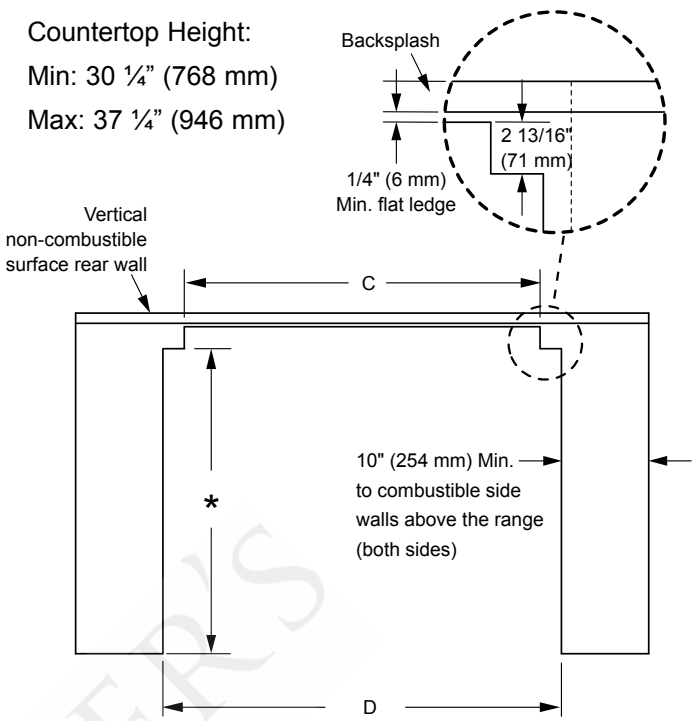
Installation Specifications

- Install the raised vent and range so that they can be removed if service is required.
- The raised vent is equipped with adjustable anchor legs to accommodate various cabinet heights. See ***Product Dimensions***.
- Plan the installation so that all minimum dimensions are met or exceeded. All contact surfaces between the raised vent and any cabinets or walls must be solid and at right angles. Refer to the range installation instructions for the minimum dimensions specific to the particular range being installed.
- Allow room for the exhaust duct coming out of the unit. See ***Planning the Duct Work*** for further details.

Model Number	ERV Cutout Width (C)	Range Cutout Width (D) Min.
ERV36-ER	33 1/2" (848 mm)	36 1/16" (916 mm)
ERV48-ER	43 1/2" (1102 mm)	48 1/16" (1221 mm)

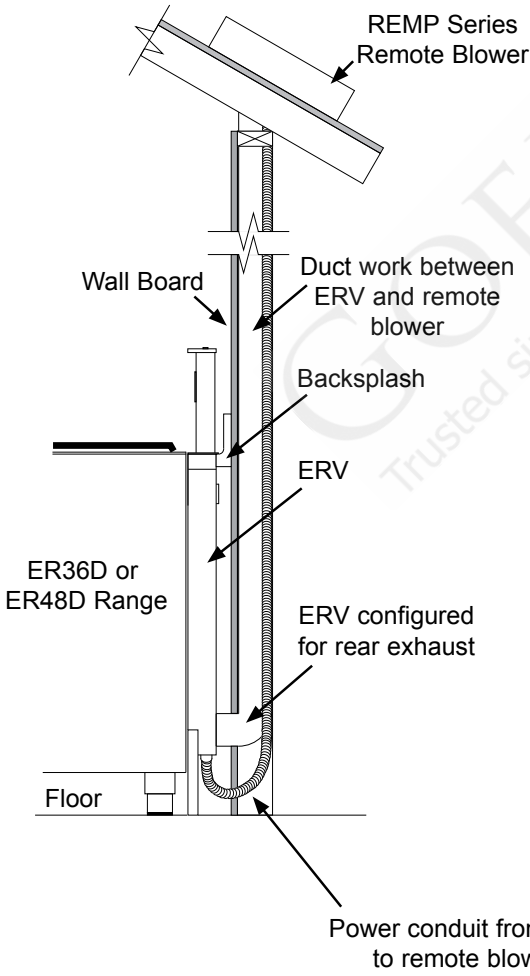
* Depth dimensions are at the discretion of the customer. For reference, depth of the ER36D/ER48D range is 28 ¼" (718 mm) from the front panel, excluding trim and knobs.

Countertop Height:
Min: 30 ¼" (768 mm)
Max: 37 ¼" (946 mm)

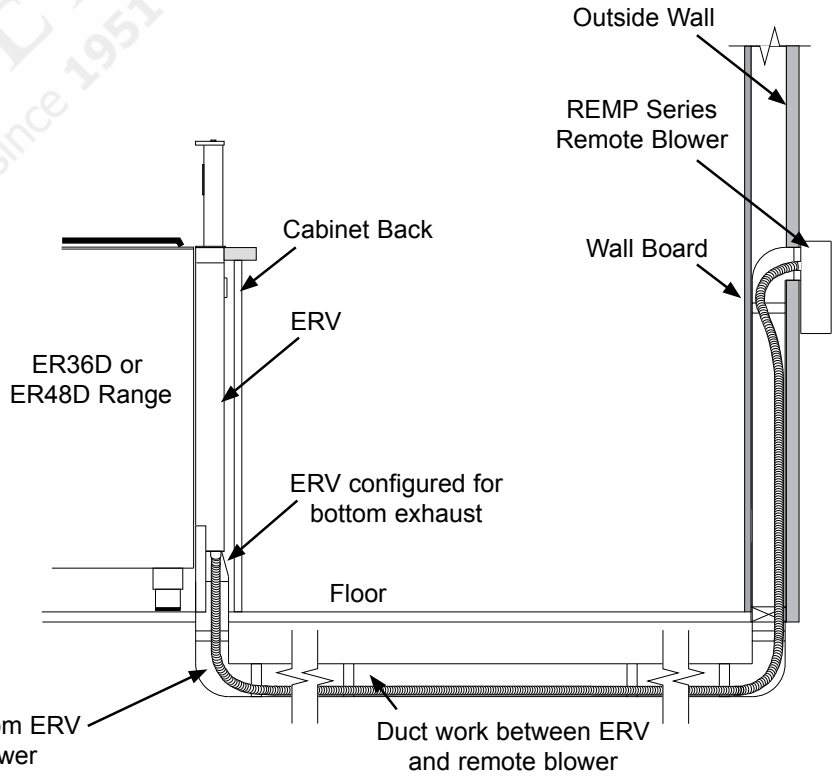

Backsplash
2 13/16" (71 mm)
1/4" (6 mm) Min. flat ledge
Vertical non-combustible surface rear wall
C
*
10" (254 mm) Min. to combustible side walls above the range (both sides)
D

Cabinet Cutout - Top View

All tolerances: +1/16", -0, (1.6 mm,0) unless otherwise stated



Example of Layout with Rear Exhaust (Side View)



Example of Layout with Bottom Exhaust (Side View)

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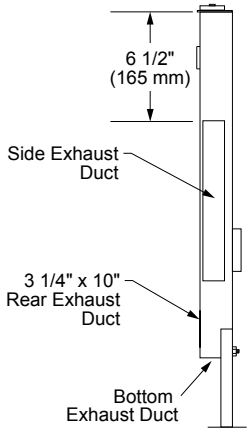
Installation Specifications

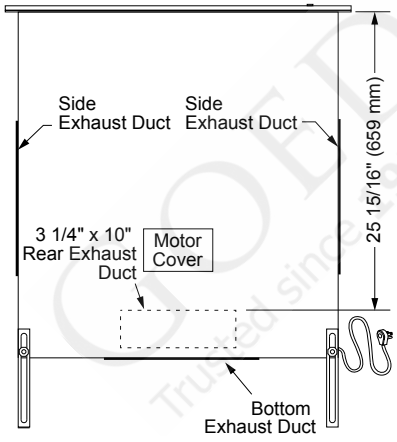
Planning the Duct Work

⚠ WARNING

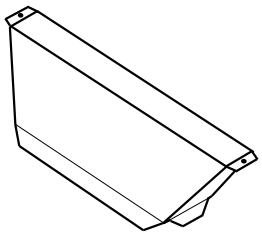
- To reduce the risk of fire and to properly exhaust air, be sure to duct air outside the house or building. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.
- Tape all duct joints securely to prevent combustion by-products, smoke or odors from entering the home. Doing so will also improve system efficiency.
- Do not exhaust more than one vent into a single duct run.
- For proper operation this unit must be installed with a remote blower. Use only Dacor models REMP3 or REMP16.
- Use only duct work constructed of materials deemed acceptable by state, municipal and local codes
- **DO NOT** install an additional in-line or external blower to increase the length of the duct run. Even small differences between blower air flow rates can greatly reduce the air draw by the hood.

- The ERV raised vent can be configured to exhaust through the back, the bottom or either side.



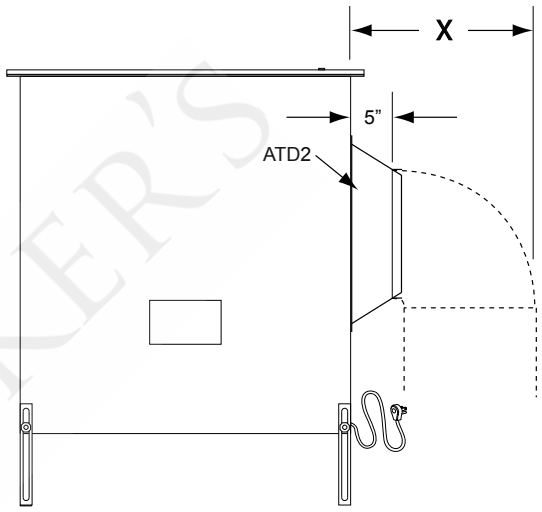


- When connecting the duct work to the back of the unit, the customer must supply a 3 ¼" X 10" rectangular transition to make the connection.
- For side and bottom exhaust connections, use the supplied ATD2 transition to connect the duct work to the unit. It transitions between the narrow exhaust outlet on the unit and a 3 ¼" X 10" rectangular duct connection. On bottom exhaust installations cut a hole in the floor to allow the transition and/or duct work to pass through the floor.



ADT2 Transition

- On side exhaust installations, allow five inches of space on the side for the ADT2 exhaust transition plus additional space for the duct attached to it (X).



- All duct work materials (including screws and duct tape) must be purchased separately by the customer.
- When planning new duct work, always look for the shortest, most direct route to the outside.
- You can increase the duct size over the duct run if desired. To prevent a back draft, never decrease the duct size over the run.
- Do not rely on duct tape alone to seal duct joints. Fasten all connections with sheet metal screws and tape all joints with certified silver tape or duct tape.
- Use sheet metal screws as require to support the duct weight.
- To prevent back-drafts, a damper at the duct outlet may also be required.
- Make sure duct work does not interfere with floor joists or wall studs.
- With concrete slab construction, "box-in" the duct work to prevent it from collapsing when the wet concrete is poured. Also allow room for electrical conduit from the remote blower.
- Cross-drafts or air currents caused by adjacent open windows or doors, heating/air conditioning outlets, ceiling fans and recessed ceiling lights reduce vent efficiency.

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Installation Specifications

Duct Work Design Tips

- Wherever possible, reduce the number of transitions and turns to as few sharp angles as possible. Two staggered 45° angles are better than one 90°. Keep turns as far away from the hood exhaust as possible, with as much space between each bend as possible.
- For best performance, use round duct instead of rectangular, especially when elbows are required.
- If multiple elbows are used, try to keep a minimum of 24” of straight duct between them. Avoid “S” or “back to back” configurations of adjacent elbows.
- In regions where the weather gets extremely cold, thermal breaks, such as a short section of non-metallic duct, should be used to avoid indoor heat loss. The break should be located as close to the pass through point to the outside as possible.
- Do not use flexible metal duct.

Calculating the Maximum Duct Run Length

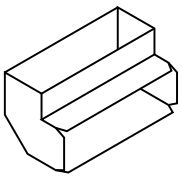
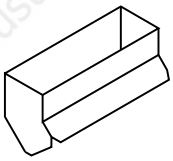
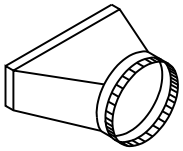
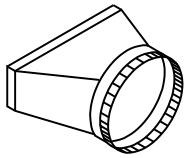
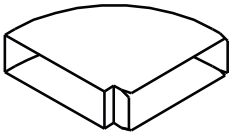
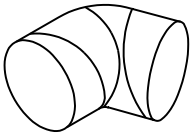
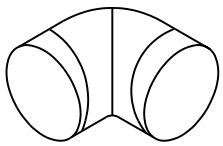
- Do not use duct work that is smaller in cross-sectional area than the required duct sizes in the table to the right.
- For best performance, keep the duct run as short as possible and <u>never</u> exceed the maximums stated below.
- The maximum straight duct length for the raised vent system depends on the model of remote blower used with vent system and the number of elbows and transitions used. The equivalent number of feet for each elbow and transition must be subtracted from the maximum straight length to compensate for wind resistance

To determine the maximum allowable length of the duct work, subtract all of the equivalent lengths of the elbows and transitions listed below from appropriate Maximum Equivalent Straight Lengths.

For example, for a raised vent system using 10 inch duct, a REMP3 remote blower and three (3) 90° elbows:

- From the Maximum Equivalent Straight Lengths table, the maximum length without transitions and elbows is 40 feet.
- The total equivalent length of the three (3) 90° 10 inch elbows is
  3 X 5 feet = 15 feet.
- The maximum amount of straight duct that can be used with a REMP3 and the elbows is: 40 feet - 6 feet = 34 feet.

Duct Size Used	Maximum Equivalent Straight Lengths of Duct Work	
	Using Model REMP3 Remote Blower	Using Model REMP16 Remote Blower
8 Inch	50 feet (15.2 meters)	60 feet (18.3 meters)
10 Inch	40 feet (12.2 meters)	70 feet (21.3 meters)
3 ¼” X 10”	40 feet (12.2 meters)	60 feet (18.3 meters)

3 1/4" x 10" 90° Elbow  15 Feet	3 1/4" x 10" 45° Elbow  7 Feet	Transition 3 1/4" to 8” Round  4 Feet	Transition 3 1/4" to 10" Round  4 Feet
3 1/4" x 10" 90° Flat Elbow  20 Feet	45° Elbow Round Duct  8" Diameter - 3 Feet 10" Diameter - 2 Feet	90° Elbow Round Duct  8" Diameter - 7 Feet 10" Diameter - 5 Feet	90° Transition 3 1/4" x 10" to 8" Round 25 Feet

Equivalent Lengths - Duct Elbows and Transitions

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Installation Instructions

Installation Preparation

Verify Package Contents

- Use and care manual
- Anchoring legs
- 4 wood screws for anchor legs
- 3 wire nuts
- ADT2 duct transition
- 2 sheet metal screws for ADT2 mounting
- 2 nuts and washers to secure anchor legs
- Insulation foam

Verify that the raised vent and blower being installed are a matched pair before beginning the installation.

Installation

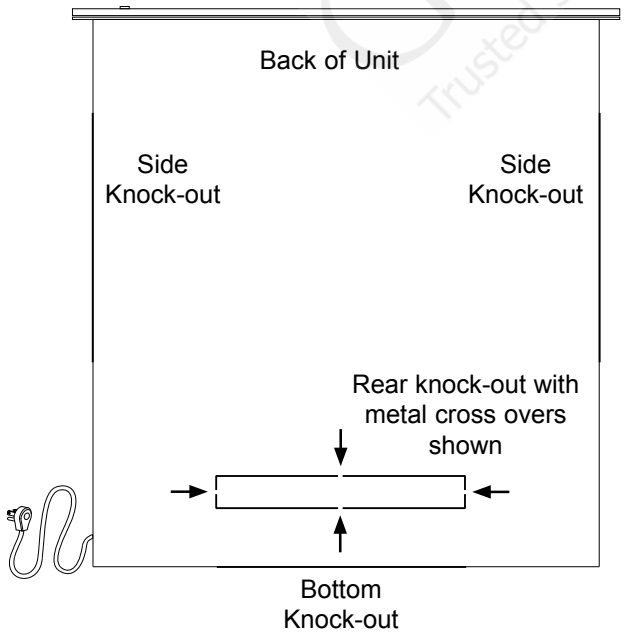
⚠ WARNING

- If the electrical service (electrical outlet) does not meet the ***Electrical Specifications*** on page 4, do not proceed with the installation. Call a licensed electrician and have an electrical outlet installed that meets the specifications.

Install the vent only in a vertical orientation. Do not mount the vent on a slant or angle.

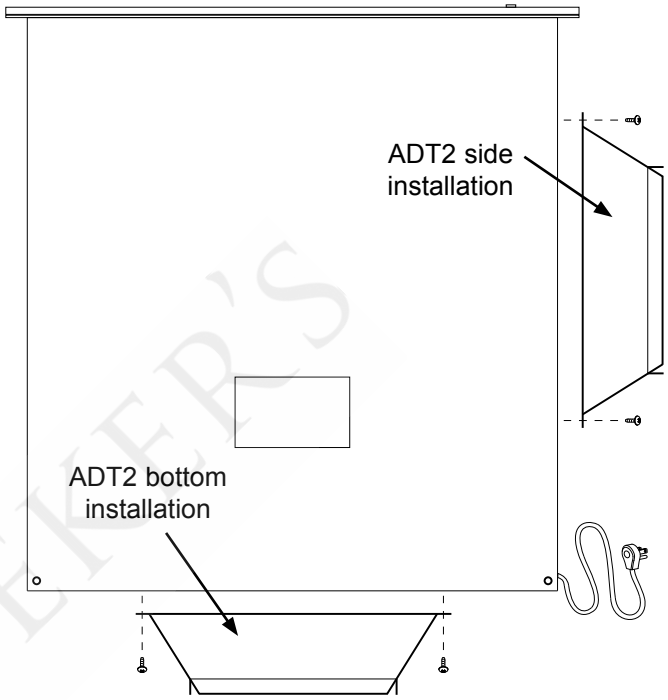
Installing the Raised Vent

1. Remove the appropriate side, back or bottom exhaust knockout, depending on the duct configuration, from the raised vent assembly by cutting the metal cross overs and removing the insert.



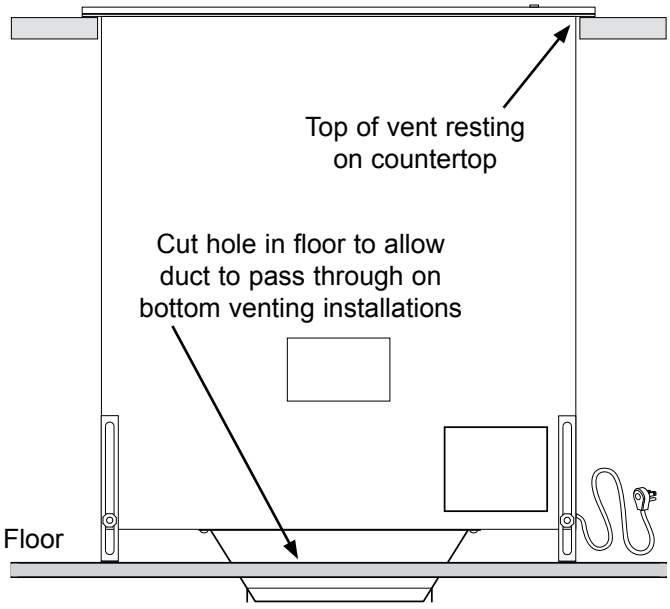
Vent Knock-out Locations

2. Cut and remove the foil material inside the knock-out hole. If you fail to remove the foil, the vent will not work.
3. If the unit will vent through the bottom or side:
   - For side installations, attach the supplied ATD2 transition to the side of the unit that will exhaust the air. Install an elbow to the transition with the output pointing down.



ADT2 Transition Installation

   - For bottom installations, attach the supplied ATD2 transition to the bottom of the unit. Cut a hole in the cabinet floor to allow the exhaust transition and/or the duct to pass through the floor.



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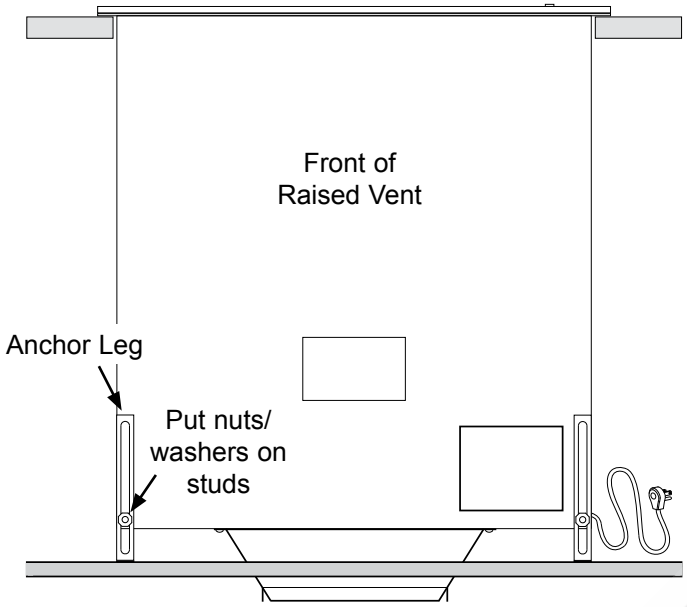
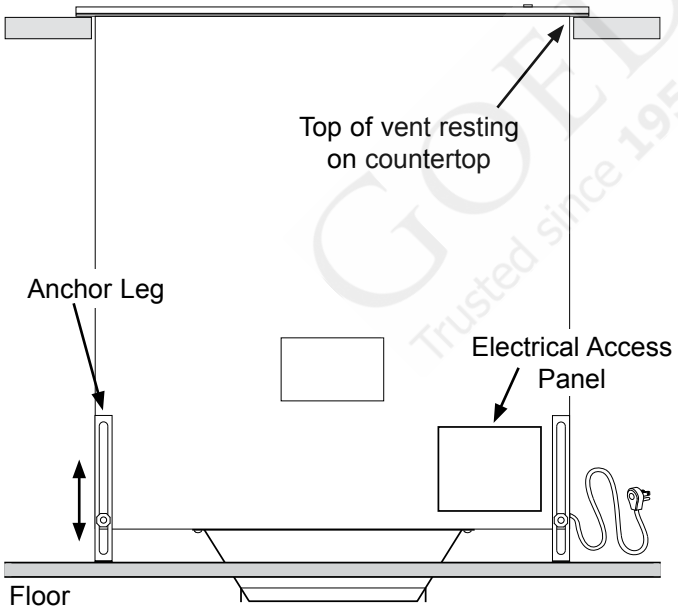
Trusted since 1951

4. If the unit will exhaust air from the back, attach a 3 1/4" X 10 duct to the vent hole created by removing the knock-out on the back of the unit.
5. Loosely attach the anchoring legs to the studs on the left and right sides of the raised vent using the provided hex nuts and washers.



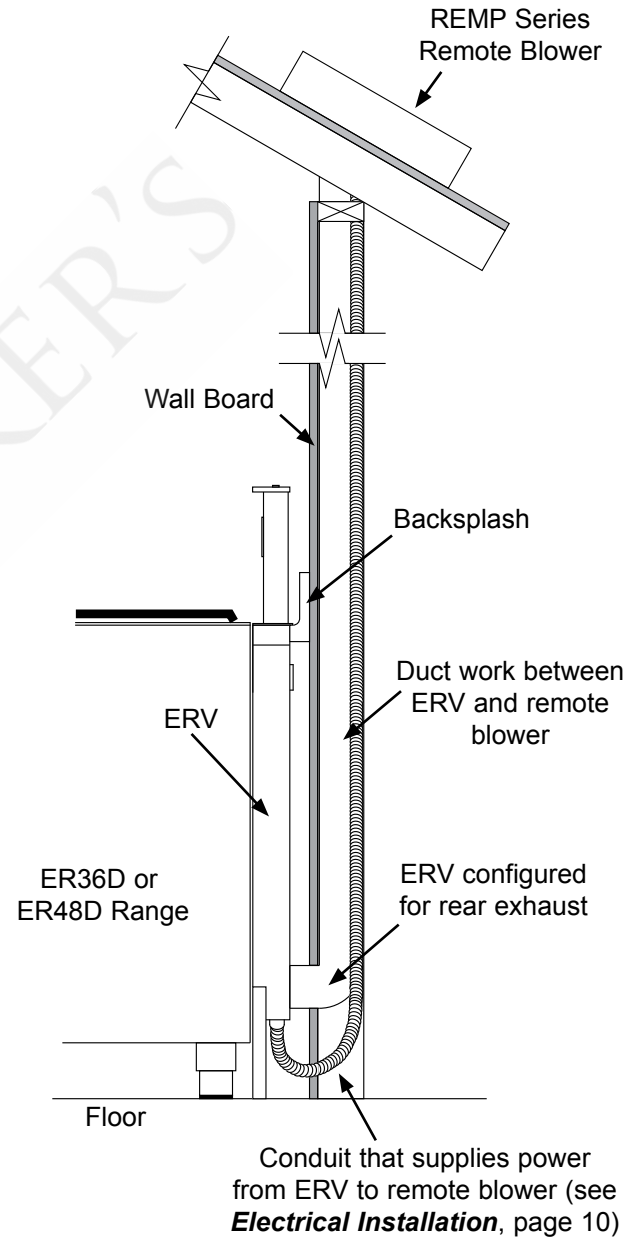
6. Place the vent into the rear of the countertop cutout with the electrical access panel toward the front.



7. Adjust the anchoring leg height so that the end caps are gently resting on the counter, then tighten the hex nuts.
8. Secure the anchoring legs to the cabinet floor with the screws provided.

Installing the Remote Blower and Ducts

1. Install the remote blower according the remote blower installation instructions.
2. Install the duct work between the remote blower inlet and the exhaust of the raised vent according to the ***Installation Specifications***. Use sheet metal screws and duct tape to connect all of the pieces. Support the duct weight as necessary to ensure sealed joints.



Example of Installation with Rear Exhaust (Side View)

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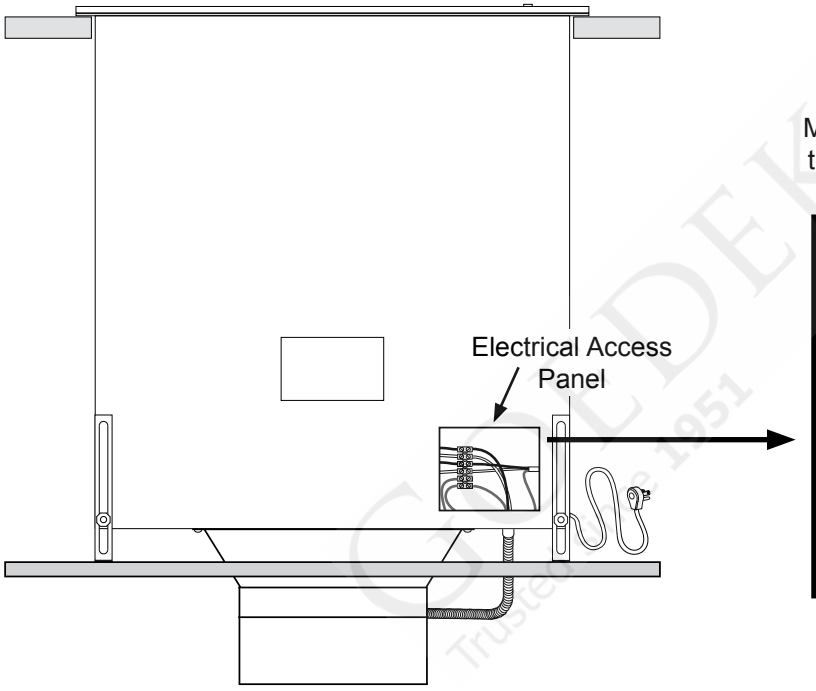
Electrical Installation

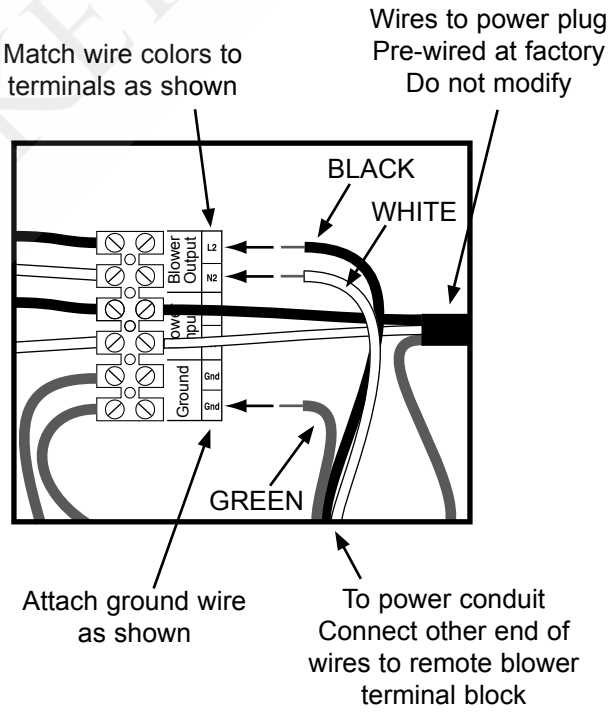
⚠ WARNING

ELECTRIC SHOCK HAZARD - Do not connect power to the unit until installation is complete.

1. Run the conduit line used to supply power from the raised vent to the remote blower parallel to the duct work.
2. Make sure the raised vent power plug is disconnected from the electrical outlet.
3. Remove the cover from the raised vent electrical access panel.
4. Connect the conduit to the remote blower as shown in the wiring diagrams on this page and the facing page.
5. Replace the electrical access panel.



**ERV Raised Vent
Front View**



**ERV Electrical
Access Panel**

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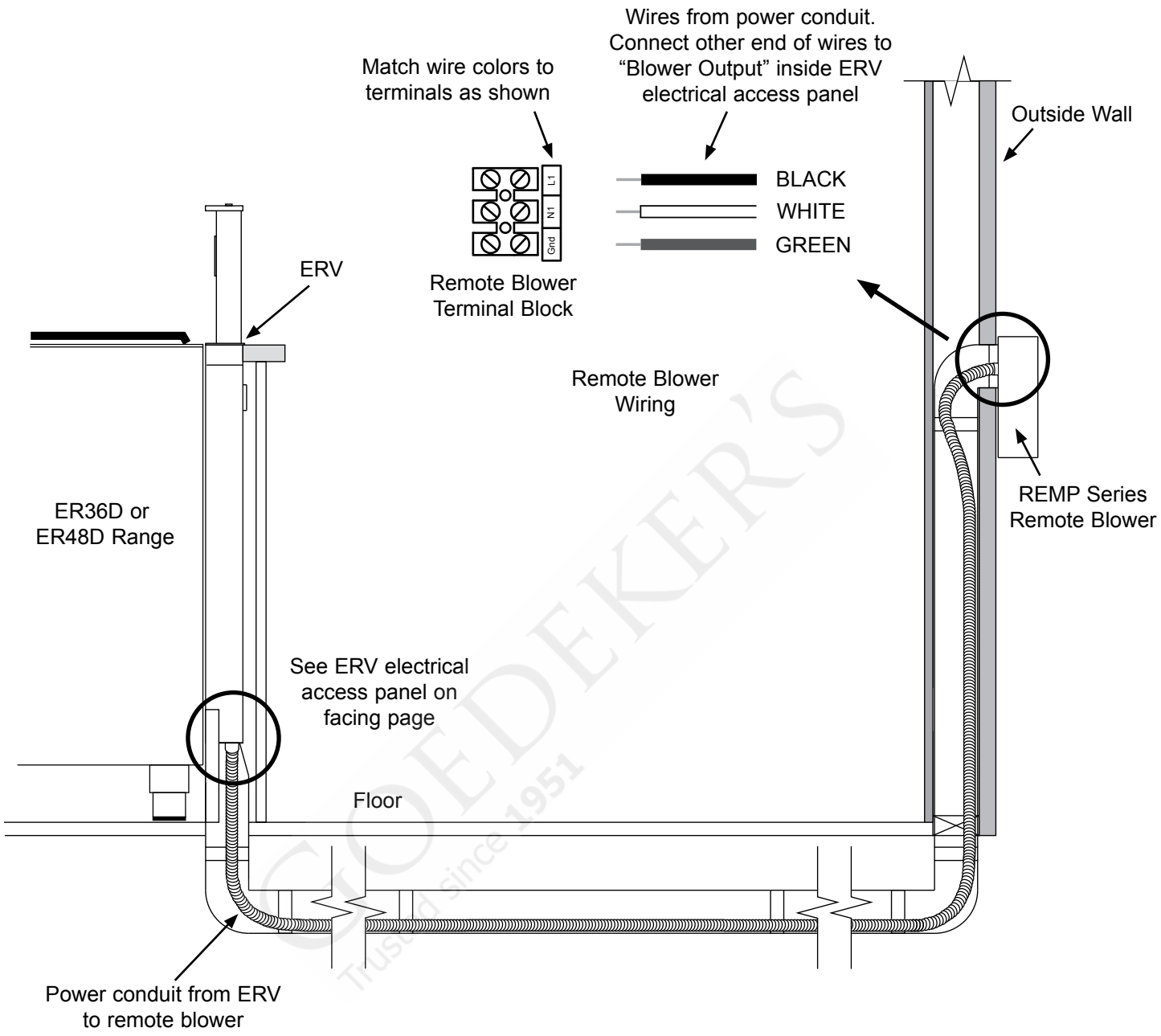

Example of Installation with Bottom Exhaust (Side View)

Range Installation

Install the range according to the range installation instructions.

Once the range is installed, make sure that the top cap on the raised vent intake does not catch on the back edge of the range when the intake is lowered.

If interference does occur, adjust the position of the range by moving it against the front edge of the countertop cutout.

Make sure the vent anchoring legs are properly secured to the cabinet base with the supplied wood screws. Failure to eliminate any interference may result in permanent damage to the vent.

Verifying Proper Operation

⚠ WARNING

- Read the raised vent use and care manual completely before operation.
- Install all of the front filters prior to operating the raised vent. Refer to the use and care manual for filter installation instructions.

⚠ CAUTION

To prevent damage to the raised vent power cord, route it away from the surfaces of the range before connecting it.

1. Make sure the power switch on the top of the raised vent is in the up position.
2. Plug the raised vent power plug into the electrical outlet.
3. Press the power switch once to raise the vent to its operating position.
4. Once in the up position, turn the variable speed control switch in both directions to verify that the blower is operating correctly. Turn the variable speed control switch counter-clockwise to hi-speed and clockwise to low speed.
5. Press the top cap up/down switch once to lower the vent.

Installation Checklist

☐ Are the anchor legs extended down to make contact with the floor and tightened into place? Are the anchor legs fastened to the floor? Is the unit level?

☐ Is the duct work completely installed? Are all joints attached with sheet metal screws and wrapped with duct tape?

☐ Is the power input for the remote blower connected to the raised vent electrical access panel?

☐ Are the vent filters installed according to these instructions?

☐ Is the power cord routed away from the hot surfaces of the range.

☐ Is the unit connected to an electrical outlet that meets the electrical specifications in these instructions?

☐ Has proper operation been verified?

☐ Have any problems been noted on the warranty card or during the on-line activation? Has the warranty been activated on-line or the warranty card been filled out completely and mailed?

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